REIMBURSABLE SPACE ACT AGREEMENT BETWEEN

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LYNDON B. JOHNSON SPACE CENTER WHITE SANDS TEST FACILITY AND RAYTHEON COMPANY

FOR NEXT GENERATION INTERCEPTOR (NGI) HOT FIRE TESTING. NO. SAA-RA-22-36540

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)), this Agreement is entered into by the National Aeronautics and Space Administration NASA Lyndon B. Johnson Space Center White Sands Test Facility, located at 12600 NASA Road, Las Cruces, NM 88012 (hereinafter referred to as "NASA JSC," "JSC," "NASA WSTF," "WSTF," or "NASA") and Raytheon Company, Raytheon Missiles and Defense located at 1151 Hermans Road, Tucson, AZ 85756-9367 (hereinafter referred to as "Partner" or "Raytheon"). NASA and Partner may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

The purpose of this agreement is to allow NASA White Sands Test Facility (WSTF) to perform development and qualification static hot fire testing of the Next Generation Interceptor (NGI) Liquid Divert and Attitude Control System (LDACS). Both the development and the qualification test articles will consist of liquid bi-propellant propulsion systems using MON-25 and Monomethylhydrazine (MMH). Hot fire testing at WSTF will include testing one LDACS development unit and two qualification units. This testing is currently anticipated to be performed at NASA WSTF Propulsion 400 Area using the altitude simulation test stands. WSTF shall preform test stand and facility preparations for hot fire testing, conduct hot fire, decontaminate, and conduct post hot fire inspections of the test articles. WSTF to provide test results and collected data to Raytheon for assessment of the LDACS system performance in both the early configuration (development unit) and flight configuration (qualification units) to NGI development program requirements.

ARTICLE 3. RESPONSIBILITIES

NASA will use reasonable efforts to:

- 1. Participate in a technical interchange/kick off meeting.
- 2. Develop a WSTF test directive for this test series.
- 3. If requested, WSTF will ship to Partner, or delegate, their existing interceptor test equipment.

- 4. Provide propellants (Monomethylhydrazine (MMH) and Mixed Oxides of Nitrogen (MON-25)), pressurant (gaseous nitrogen (GN2) and/or gaseous helium (GHe)), and ordinance initiator per Raytheon provided specification.
- 5. Provide main propellant storage tanks, and feed systems capable of supplying MON-25, MMH, and pressurant to the test article.
- 6. Perform ordering, installation and removal of pyro valve ordinance.
- 7. Provide unclassified facility instrumentation and data acquisition for all feed systems and propellant handling systems.
- 8. Provide remotely operated high speed still photography, high speed video (500 frames per second), low speed video (30 frames per second), high-definition video, and infra-red video.
- 9. Provide high and low frequency data acquisition system for facility instrumentation.
- 10. Provide security infrastructure and protocol necessary to meet the security classification requirement of the program.
- 11. Provide fabrication/modification of facility-to-LDACS interface test fixtures, structure, bracketry, and equipment for handling, loading and hot fire configuration of LDACS Development Test Unit (DVT) test stand.
- 12. Provide fabrication/modification of propellant and pressurant supply and detanking systems, and LDACS DVT test stand post-test decontamination systems, per test requirements.
- 13. Provide fabrication/modification of facility-to-LDACS interface test fixtures, structure, bracketry for handling, loading and hot fire configuration of LDACS Oualification Unit test stand.
- 14. Provide fabrication/modification of propellant and pressurant supply and detanking systems, and LDACS Qualification unit test stand post-test decontamination systems, per test requirements.
- 15. Conduct Design and System Safety Reviews with support from Raytheon in accordance with WSTF Policy.
- 16. Generate Procedures for hazardous operations (i.e., propellant handling, ordinance installation/removal, hot fire testing, pre & post-test test article (TA) servicing, and TA decontamination).
- 17. Prepare and conduct a Test Readiness Review (TRR) with support from AR.
- 18. Perform hot fire tests at altitude(s) specified by partner.
- 19. Perform decontamination of facility and test hardware. Provide a final report documenting the results of all test operations.
- 21. Provide cost/milestone reporting through project life cycle.
- 22. Disassemble the modified LDACS development and qualification test systems, remove facility-to-LDACS interface test fixtures, structures, and bracketry to return test stands to neutral configuration.
- 23. Procure two HSV cameras, three Infrared cameras, cans and stands for video cameras and 6 hard drives.
- 24. Ship back procured items to partner; two HSV cameras, three Infrared cameras, cans and stands for video cameras and 6 hard drives.

Raytheon will use reasonable efforts to:

- 1. Participate in kickoff/Technical Interchange Meeting (TIM).
- 2. Provides WSTF Facility Requirements Document (FRD), hardware drawings, interface control drawings, instrumentation lists, and supporting documentation.
- 3. Provide review and approval of WSTF test directive for facility requirements and LDACS testing.
- 4. Support design reviews, system safety reviews, and test readiness reviews conducted per WSTF processes.
- 5. Provide WSTF with LDACS DVT and Qualification test plans.
- 6. Provide secure STE, DDAS, and GTI and associated support engineers/operators for install and operation of these systems and equipment.
- 7. Provide delivery and return transport of the LDACS DVT, Qualification-1, and Qualification-2 Test Articles to and from WSTF.
- 8. Provide pyro valve ordinance and ordinance initiator specifications.
- 9. Review and provide approval on all system designs, test configurations and procedures.
- 10. Participate in operation of Raytheon provided systems during DVT and Qualification hot-fire testing.
- 11. Contribute to development of final test reports and data packages.

Start of Project

ARTICLE 4. SCHEDULE AND MILESTONES

The planned major milestones for the activities defined in the "Responsibilities" Article are as follows:

Authority To Proceed

Start of Froject	Authority 10 1 10cccu
Raytheon and WSTF to conduct a kickoff/Technical Interchange Meeting (TIM).	+2 weeks
WSTF ship to Raytheon or delegate, their existing interceptor test equipment, if requested.	+4 weeks
Raytheon provides Facility Requirements Document (FRD), LDACS hardware drawings, interface control drawings, instrumentation lists, and supporting documentation.	+2 Month from TIM
WSTF provides initial test directive covering FRD scope to Raytheon for approval.	+2 Months
WSTF and Raytheon prepare and conduct a Preliminary Design Review (PDR).	+2 Months
Raytheon provides LDACS test plan.	+2 Months

WSTF provides final test directive covering LDACS test plan scope to Raytheon for approval.	+3 Months
WSTF and Raytheon prepare and conduct a Critical Design Review (CDR) and System Safety Review.	+ 4 Months
Raytheon provides secure STE, DDAS, and test article specific GTI.	+5 Months
WSTF completes fabrication/modification of facility-to- LDACS Development (DVT) TA interface test fixtures, structure, bracketry, and configuration of test stand for TA loading and hot fire.	+6 Months
Raytheon delivers LDACS DVT Test Article (TA) to WSTF.	+7 Months
WSTF completes LDACS DVT unit test stand build up and modification of propellant and pressurant supply and detanking systems, post-test decontamination systems per test requirements.	+8 Months
WSTF completes procurement and receives pyro valve ordinance and ordinance initiator per Raytheon provided specifications.	+8 Months
WSTF completes procurement of propellants, pressurants, and a LASS required commodities.	+8 Months
WSTF and Raytheon complete installation of secure STE, DDAS, and GTI.	+9 Months
WSTF completes installation of high/low speed high definition still photography and video, infrared video, high/low frequency DACS for facility systems in DVT unit Test Stand.	+9 Months
WSTF provides Raytheon procedures for LDACS TA hazardous operations and testing.	+9 Months
Raytheon reviews and provides approval on all LDACS DVT test systems, test configurations, and procedures.	+9 Months
WSTF and Raytheon conduct LDACS DVT Test Readiness Review per WSTF processes.	+10 Months
WSTF and Raytheon perform hot-fire testing of the LDACS DVT unit.	+10 Months
WSTF LDACS DVT test stand returned to neutral configuration.	No later than 1 calendar month from hot fire completion date.

WSTF completes fabrication/modification of facility-to- LDACS Qualification TA interface test fixtures, structure, bracketry, and configuration of test stand for TA loading and hot fire.	+19 Months
Raytheon delivers the LDACS Qualification Unit-1 to WSTF.	+20 Months
WSTF completes LDACS Qualification test stand build up and modification of propellant and pressurant supply and detanking systems, post-test decontamination systems, per test requirements.	+21 Months
WSTF completes installation of high/low speed high definition still photography and video, infrared video, high/low frequency DACS for facility systems in Qualification Test Stand.	+22 Months
Raytheon reviews and provides approval on all LDACS Qualification test systems, test configurations, and procedures.	+23 Months
WSTF and Raytheon conduct LDACS Qualification Test Readiness Review per WSTF process.	+24 Months
Raytheon and WSTF perform hot-fire testing of the LDACS Qualification Unit-1.	+25 Months
Raytheon delivers to WSTF the LDACS Qualification Unit-2.	+31 Months
Raytheon and WSTF perform hot-fire testing of the LDACS Qualification Unit-2.	+32 Months
WSTF performs decontamination of the facility and LDACS Test Hardware.	No later than 14 calendar days from hot fire completion date
WSTF provides Raytheon final data report documenting the results of all test operations.	No later than 10 calendar days from hot fire completion date
WSTF return all secure STE, DDAS, and GTI to Raytheon; return the Qualification test stand to neutral configuration.	No later than 6 calendar months from hot fire completion date

ARTICLE 5. FINANCIAL OBLIGATIONS

A. Partner agrees to reimburse NASA an estimated cost of \$9,894,011.64 for NASA to carry out its responsibilities under this Agreement. In no event will NASA transfer any

- U.S. Government funds to Partner under this Agreement. Payment must be made by Partner in advance of initiation of NASA's efforts on behalf of the Partner.
- B. Payment shall be payable to the National Aeronautics and Space Administration through the NASA Shared Services Center (NSSC) (choose one form of payment):

Option 1: Online payment via Bank Account (ACH) or Debit/Credit Card

- 1. Go to the NASA Shared Services Center (NSSC) Customer Service Website at https://www.nasa.gov/specials/nssc-pay/
 - a) Select the appropriate NASA Center from the arrow down menu "JSC -Johnson Space Center"
 - b) Select "Advances" from the Transaction Type arrow down menu
 - c) NASA Agreement Number is the NASA Partnership/PAM Number from the signed Agreement, example: SAA-22-36180 or just 36180
 - d) Complete YOUR information for Business Contact Name, Company Name, Contact Phone Number, and Email Address
 - e) For the NASA POC Name, enter the name of your *JSC Agreement Manager* or **Barb McMillan**
- 2. Click the "Submit" button
- 3. On the "JSC Reimbursable Agreement Advance Collection" screen, select the desired method and click the "Continue" button
 - a) Bank account (ACH)
 - b) Debit or credit card
- 4. Complete the form and click the "Continue" button
- 5. You will receive a confirmation number at the end of the transaction. Please retain this number for your records.

Option 2: Payment via Check to NASA Accounts Receivable

Make your check payable to **NASA Johnson Space Center** and annotate the NASA Agreement Number on the check or accompanying support (Example: "36180"). Mail the check to:

NASA Shared Services Center (NSSC) – FMD Accounts Receivable Attention: For the Accounts of Johnson Space Center Bldg. 1111, Jerry Hlass Rd. Stennis Space Center, MS 39529

C. NASA will not provide services or incur costs beyond the existing payment. Although NASA has made a good faith effort to accurately estimate its costs, it is understood that NASA provides no assurance that the proposed effort under this Agreement will be accomplished for the above estimated amount. Should the effort cost more than the estimate, Partner will be advised by NASA as soon as possible. Partner shall pay all costs incurred and has the option of canceling the remaining effort or providing additional funding to continue the proposed effort under the revised estimate. Should this Agreement be terminated, or the effort completed at a cost less than the agreed-to estimated cost, NASA shall account for any unspent funds within one (1) year

after completion of all effort under this Agreement, and promptly thereafter return any unspent funds to Partner. Return of unspent funds will be processed via Electronic Funds Transfer (EFT) in accordance with 31 C.F.R. Part 208 and, upon request by NASA, Partner agrees to complete the Automated Clearing House (ACH) Vendor/Miscellaneous Payment Enrollment Form (SF 3881).

D. Notwithstanding any other provision of this Agreement, all activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this Agreement is estimated based upon the Parties' current understanding of the projected availability of NASA goods, services, facilities, or equipment. If NASA's projected availability changes, Partner shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of the goods, services, facilities, or equipment shall have priority over the use planned in this Agreement. Should a conflict arise, NASA in its sole discretion shall determine whether to exercise that priority. Likewise, should a conflict arise as between two or more non-NASA Partners, NASA, in its sole discretion, shall determine the priority as between those Partners. This Agreement does not obligate NASA to seek alternative government property or services under the jurisdiction of NASA at other locations.

ARTICLE 7. NONEXCLUSIVITY

This Agreement is not exclusive; accordingly, NASA may enter into similar agreements for the same or similar purpose with other private or public entities.

ARTICLE 8. LIABILITY AND RISK OF LOSS

- A. Partner hereby waives any claims against NASA or one or more of its Related Entities for any injury to, or death of, Partner or one or more of its Related Entities, or for damage to, or loss of, Partner's property or the property of its Related Entities, arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct. For purposes of this Agreement, "Related Entities" shall mean contractors and subcontractors of a Party at any tier; grantees, investigators, customers, and users of a Party at any tier and their contractors or subcontractor at any tier; or employees of the Party or any of the foregoing.
- B. Partner further agrees to extend this unilateral waiver to its related entities by requiring them, by contract or otherwise, to waive all claims against NASA and its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. In the event the U.S. Government incurs any liability

based upon Partner's failure to provide for the waiver by Partner's Related Entities set out above, Partner agrees to indemnify and hold the U.S. Government harmless against such liability, including costs and expenses incurred by the U.S. Government in defending against any suit or claim for liability by Partner's Related Entities.

- C. In the event U.S. Government property is damaged because of activities conducted under this Agreement for the primary benefit of Partner, except in the case of gross negligence or willful misconduct by NASA, Partner shall be solely responsible for the repair and restoration of such property subject to NASA direction.
- D. Notwithstanding the other provisions of this Article, the waiver of liability set forth in this section shall not be applicable to:
- i. Claims between Partner and its own Related Entity or between its own Related Entities.
- ii. Claims made by a natural person, his/her estate, survivors, or anyone claiming by or through him/her (except when such person or entity is a Party to this Agreement or is otherwise bound by the terms of this waiver) for bodily injury to, or other impairment of health of, or death of, such person.
- iii. Claims for damage caused by willful misconduct.
- iv. Intellectual property claims.
- v. Claims for damage resulting from a failure of Partner to extend the waiver of liability to its Related Entities, pursuant to paragraph B of this Article; or
- vi. Claims by Partner arising out of or relating to NASA's failure to perform its obligations under this Agreement.

ARTICLE 9. <u>LIABILITY AND RISK OF LOSS - INSURANCE FOR DAMAGE TO</u> NASA PROPERTY

- A. Partner shall, at no cost to NASA, maintain throughout the term of the Agreement, insurance covering claims for bodily injury, personal injury, death, property damage, or other loss or damages arising from any activities conducted under this Agreement at such limits and upon such terms as are acceptable to NASA in its reasonable discretion, and shall provide NASA acceptable evidence of such insurance. Policy(ies) for property insurance must cover the cost of repair or replacement (as reasonably determined by NASA) of any U.S. Government property (real or personal) damaged as a result of activities conducted under this Agreement.
- B. By signing this Agreement, Partner certifies that all insurance required under this Agreement is in effect, and is issued by companies with a credit rating of at least "A-" and a financial size category of at least "VIII" in the current edition of Best's Insurance Reports (or its equivalent successor, or, if there is no equivalent successor rating, otherwise mutually acceptable to the Parties) and are licensed to do and doing business in all states in which activities will be conducted under the Agreement. NASA is not obligated to provide access to its facilities or equipment under this Agreement until and unless the insurance required by this section is in effect. Any deductibles selected by Partner for any insurance coverage shall be the sole responsibility of Partner.

ARTICLE 9. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. General

- 1. "Related Entity" as used in this Data Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner that is assigned, tasked, or contracted to perform activities under this Agreement.
- 2. "Data" means recorded information, regardless of form, the media on which it is recorded, or the method of recording.
- 3. "Proprietary Data" means Data embodying trade secrets developed at private expense or commercial or financial information that is privileged or confidential, and that includes a restrictive notice, unless the Data is:
- a. known or available from other sources without restriction;
- b. known, possessed, or developed independently, and without reference to the Proprietary Data;
- c. made available by the owners to others without restriction; or
- d. required by law or court order to be disclosed.
- 4. Data exchanged under this Agreement is exchanged without restriction except as otherwise provided herein.
- 5. Notwithstanding any restrictions provided in this Article, the Parties are not restricted in the use, disclosure, or reproduction of Data provided under this Agreement that meets one of the exceptions in 3., above. If a Party believes that any exceptions apply, it shall notify the other Party before any unrestricted use, disclosure, or reproduction of the Data.
- 6. The Parties will not exchange preexisting Proprietary Data under this Agreement unless authorized herein or in writing by the owner.
- 7. If the Parties exchange Data having a notice that the Receiving Party deems is ambiguous or unauthorized, the Receiving Party shall tell the Providing Party. If the notice indicates a restriction, the Receiving Party shall protect the Data under this Article unless otherwise directed in writing by the Providing Party.
- 8. The Data rights herein apply to the employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.
- 9. Disclaimer of Liability: NASA is not restricted in, or liable for, the use, disclosure, or reproduction of Data without a restrictive notice or for Data Partner gives, or is required to give, the U.S. Government without restriction.
- 10. Partner may use the following or a similar restrictive notice:

Proprietary Data Notice

The data herein include Proprietary Data and are restricted under the Data Rights provisions of Space Act Agreement [provide applicable identifying information].

Partner should also mark each page containing Proprietary Data with the following or a similar legend: "Proprietary Data – Use and Disclose Only Under the Notice on the Title or Cover Page."

B. Data First Produced by Partner Under this Agreement

If Data first produced by Partner or its Related Entities under this Agreement is given to NASA, and the Data is Proprietary Data, and it includes a restrictive notice, NASA will use reasonable efforts to protect it. The Data will be disclosed and used (under suitable protective conditions) only for U.S. Government purposes.

C. Data First Produced by NASA Under this Agreement

If Partner requests that Data first produced by NASA under this Agreement be protected, and NASA determines it would be Proprietary Data if obtained from Partner, NASA will mark it with a restrictive notice and use reasonable efforts to protect it for five years after its development. During this restricted period the Data may be disclosed and used (under suitable protective conditions) for U.S. Government purposes only, and thereafter for any purpose. Partner must not disclose the Data without NASA's written approval during the restricted period. The restrictions placed on NASA do not apply to Data disclosing a NASA owned invention for which patent protection is being considered.

D. Publication of Results

The National Aeronautics and Space Act (51 U.S.C. § 20112) requires NASA to provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof. As such, NASA may publish unclassified and non-Proprietary Data resulting from work performed under this Agreement. The Parties will coordinate publication of results allowing a reasonable time to review and comment.

E. Data Disclosing an Invention

If the Parties exchange Data disclosing an invention for which patent protection is being considered, and the furnishing Party identifies the Data as such when providing it to the Receiving Party, the Receiving Party shall withhold it from public disclosure for a reasonable time (one (1) year unless otherwise agreed or the Data is restricted for a longer period herein).

F. Copyright

Data exchanged with a copyright notice and with no restrictive notice is presumed to be published. The following royalty-free licenses apply:

- 1. If indicated on the Data that it was produced outside of this Agreement, it may be reproduced, distributed, and used to prepare derivative works only for carrying out the Receiving Party's responsibilities under this Agreement.
- 2. Data without the indication of F.1. is presumed to be first produced under this Agreement. Except as otherwise provided in paragraph E. of this Article, and in the Invention and Patent Rights Article of this Agreement for protection of reported

inventions, the Data may be reproduced, distributed, and used to prepare derivative works for any purpose.

G. Data Subject to Export Control

Whether or not marked, technical data subject to the export laws and regulations of the United States provided to Partner under this Agreement must not be given to foreign persons or transmitted outside the United States without proper U.S. Government authorization.

- H. Handling of Background, Third Party Proprietary, and Controlled Government Data
- 1. NASA or Partner (as Disclosing Party) may provide the other Party or its Related Entities (as Receiving Party):
- a. Proprietary Data developed at Disclosing Party's expense outside of this Agreement (referred to as Background Data);
- b. Proprietary Data of third parties that Disclosing Party has agreed to protect or is required to protect under the Trade Secrets Act (18 U.S.C. § 1905) (referred to as Third Party Proprietary Data); and
- c. U.S. Government Data, including software and related Data, Disclosing Party intends to control (referred to as Controlled Government Data).
- 2. All Background, Third Party Proprietary and Controlled Government Data provided by Disclosing Party to Receiving Party shall be marked by Disclosing Party with a restrictive notice and protected by Receiving Party in accordance with this Article.
- 3. Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data.
- a. Background Data:

The Disclosing Party's Background Data, if any, will be identified in a separate technical document.

b. Third Party Proprietary Data:

The Disclosing Party's Third-Party Proprietary Data, if any, will be identified in a separate technical document.

c. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.

d. Notwithstanding H.4., NASA software and related Data will be provided to Partner under a separate Software Usage Agreement (SUA). Partner shall use and protect the related Data in accordance with this Article. Unless the SUA authorizes retention, or Partner enters a license under 37 C.F.R. Part 404, the related Data shall be disposed of as NASA directs:

None

- 4. For such Data identified with a restrictive notice pursuant to H.2. including such Data identified pursuant to this Article, Receiving Party shall:
- a. Use, disclose, or reproduce such Data only as necessary under this Agreement.
- b. Safeguard such Data from unauthorized use and disclosure;

- c. Allow access to such Data only to its employees and any Related Entity requiring access under this Agreement;
- d. Except as otherwise indicated in 4.c., preclude disclosure outside Receiving Party's organization;
- e. Notify its employees with access about their obligations under this Article and ensure their compliance, and notify any Related Entity with access about their obligations under this Article; and
- f. Dispose of such Data as Disclosing Party directs.

I. Oral and visual information

If Partner discloses Proprietary Data orally or visually, NASA will have no duty to restrict, or liability for disclosure or use, unless Partner:

- 1. Orally informs NASA before initial disclosure that the Data is Proprietary Data, and
- 2. Reduces the Data to tangible form with a restrictive notice and gives it to NASA within ten (10) calendar days after disclosure.

ARTICLE 10. <u>INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT</u> RIGHTS

- A. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement.
- B. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.
- C. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent rights are exchanged or granted under this Agreement. NASA and Partner will use reasonable efforts to report inventions made jointly by their employees (including employees of their Related Entities). The Parties will consult and agree on the responsibilities and actions to establish and maintain patent protection for joint invention, and on the terms and conditions of any license or other rights exchanged or granted between them.

ARTICLE 11. <u>RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA</u>

NASA or Partner may, consistent with Federal law and this Agreement, release general information regarding its own participation in this Agreement as desired.

Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that a copy of this Agreement will be disclosed, without redactions, in accordance with the NTAA.

ARTICLE 12. USE OF NASA NAME AND NASA EMBLEMS

A. NASA Name and Initials

Partner shall not use "National Aeronautics and Space Administration" or "NASA" in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the "Release of General Information to the Public and Media" Article, Partner must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to the NASA Associate Administrator for the Office of Communications or designee ("NASA Communications") for review and approval. Approval by NASA Office of Communications shall be based on applicable law and policy governing the use of the NASA name and initials.

B. NASA Emblems

Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. Partner must submit any proposed use of the emblems to NASA Communications for review and approval.

ARTICLE 13. DISCLAIMER OF WARRANTY

Goods, services, facilities, or equipment provided by NASA under this Agreement are provided "as is." NASA makes no express or implied warranty as to the condition of any such goods, services, facilities, or equipment, or as to the condition of any research or information generated under this Agreement, or as to any products made or developed under or as a result of this Agreement including as a result of the use of information generated hereunder, or as to the merchantability or fitness for a particular purpose of such research, information, or resulting product, or that the goods, services, facilities or equipment provided will accomplish the intended results or are safe for any purpose including the intended purpose, or that any of the above will not interfere with privately-owned rights of others. Neither the government nor its contractors shall be liable for special, consequential or incidental damages attributed to such equipment, facilities, technical information, or services provided under this Agreement or such research, information, or resulting products made or developed under or as a result of this Agreement.

ARTICLE 14. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or provision of goods, services, facilities or equipment under this Agreement does not constitute endorsement by NASA. Partner agrees that nothing in this Agreement will be construed to imply that NASA authorizes, supports, endorses, or sponsors any product or service of Partner resulting from activities conducted under this Agreement, regardless of the fact that such product or service may employ NASA-developed technology.

ARTICLE 15. COMPLIANCE WITH LAWS AND REGULATIONS

A. The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access, including use of Interconnection Security Agreements (ISAs), when applicable.

- B. With respect to any export control requirements:
- 1. The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Annex to this Agreement. In the absence of available license exemptions or exceptions, the Partner shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data and software, or for the provision of technical assistance.
- 2. The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Annex under this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.
- 3. The Partner will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.
- 4. The Partner will be responsible for ensuring that the provisions of this Article apply to its Related Entities.
- C. With respect to suspension and debarment requirements:
- 1. The Partner hereby certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R. Part 180, Subpart C, as supplemented by 2 C.F.R. Part 1880, Subpart C.

- 2. The Partner shall include language and requirements equivalent to those set forth in subparagraph C.1., above, in any lower tier covered transaction entered into under this Agreement.
- D. With respect to the requirements in Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year 2019, Public Law 115-232:
- 1. In performing this Agreement, Partner will not use, integrate with a NASA system, or procure with NASA funds (if applicable), "covered telecommunications equipment or services" (as defined in Section 889(f)(3) of the NDAA).
- 2. The Partner will ensure that the provisions of this Article apply to its Related Entities.

ARTICLE 16. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or three and a half years from the Effective Date, whichever comes first.

ARTICLE 17. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party. In the event of such termination, Partner will be obligated to reimburse NASA for all costs for which the Partner was responsible and that have been incurred in support of this Agreement up to the date the termination notice is received by NASA. Where Partner terminates this Agreement, Partner will also be responsible for termination costs.

ARTICLE 18. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., "Liability and Risk of Loss", "Intellectual Property Rights"-related clauses, and "Financial Obligations" shall survive such expiration or termination of this Agreement.

ARTICLE 19. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

Management Points of Contact

NASA White Sands Test Facility
Jason Noble
Director, White Sands Test Facility
12600 NASA Road

Raytheon Company
Raytheon Missiles and Defense
Melody L. Smith
Principle Subcontract Manager

Las Cruces, NM 88012 Phone: 575.524.5069 jason.e.noble@nasa.gov 1151 Hermans Road Tucson, AZ 85756-9367 Phone: 520.794.9551 kurt.lueders@raytheon.com

Technical Points of Contact

NASA White Sands Test Facility
Jeremy Bruggemann
Aerospace Engineer/Project Manager
Mail Suite: 462PD
12600 NASA Road
Las Cruces, NM 88012
Phone: 575.525.7659

jeremy.bruggemann@nasa.gov

Raytheon Company
Raytheon Missiles and Defense
Kurt Lueders
NGI LDACS IPT Lead
1151 Hermans Road
Tucson, AZ 85756-9367

ARTICLE 20. DISPUTE RESOLUTION

Except as otherwise provided in the Article entitled "Priority of Use," the Article entitled "Intellectual Property Rights – Invention and Patent Rights" (for those activities governed by 37 C.F.R. Part 404), and those situations where a pre-existing statutory or regulatory system exists (e.g., under the Freedom of Information Act, 5 U.S.C. § 552), all disputes concerning questions of fact or law arising under this Agreement shall be referred by the claimant in writing to the appropriate person identified in this Agreement as the "Points of Contact." The persons identified as the "Points of Contact" for NASA and the Partner will consult and attempt to resolve all issues arising from the implementation of this Agreement. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this Agreement, or their designees, for joint resolution. If the Parties remain unable to resolve the dispute, then the NASA signatory or that person's designee, as applicable, will issue a written decision that will be the final agency decision for the purpose of judicial review. Nothing in this Article limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

ARTICLE 21. INVESTIGATIONS OF MISHAPS AND CLOSE CALLS

In the case of a close call, mishap or mission failure, the Parties agree to provide assistance to each other in the conduct of any investigation. For all NASA mishaps or close calls, Partner agrees to comply with NPR 8621.1, "NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping" and [insert Center safety policies, as appropriate].

ARTICLE 22. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner.

ARTICLE 23. ASSIGNMENT

Neither this Agreement nor any interest arising under it will be assigned by the Partner or NASA without the express written consent of the officials executing, or successors, or higher-level officials possessing original or delegated authority to execute this Agreement.

ARTICLE 24. APPLICABLE LAW

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the Agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

ARTICLE 25. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect to or otherwise recognize a joint venture, partnership, or formal business organization, or agency agreement of any kind, and the rights and obligations of the Parties shall be only those expressly set forth herein.

ARTICLE 26. LOAN OF GOVERNMENT PROPERTY

The parties shall enter into a NASA Form 893, Loan of NASA Equipment, for NASA equipment loaned to Partner.

ARTICLE 27. SIGNATORY AUTHORITY

RAYTHEON COMPANY

The signatories to this Agreement covenant and warrant that they have authority to execute this Agreement. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND

WHITE SANDS TEST FACILITY	DEFENSE
BY:	BY:
DATE:	DATE: